

WHAT IS CLAIMED IS:

1. An information handling system comprising:
  - a rack;
  - a tray slidably mounted within the rack and movable  
5 between a retracted position and an extended position;
  - the tray having a keyboard portion for installing a keyboard component;
  - a display assembly mounted to the tray, the display assembly comprising:
    - 10 a first support arm pivotally connected to the tray and having a first longitudinal slot formed therein;
    - a second support arm pivotally connected to the tray and having a second longitudinal slot formed therein;
    - 15 a display slidably attached to the first support arm and the second support arm;
    - a first rotation support bracket pivotally connected at a first end to the tray and slidably connected at a second end to the first slot; and
    - 20 a second rotation support bracket pivotally connected at a first end to the tray and slidably connected at a second end to the second slot.

2. The system of Claim 1 further comprising:

the display having a screen-face and a rear-face,  
the display assembly movable between a storage position  
and a viewing position;

5 the storage position comprising the display  
positioned forward of the keyboard portion in a generally  
horizontal position and the screen-face having a downward  
facing orientation; and

the viewing position comprising the display assembly  
10 rotated into a generally vertical position.

3. The system of Claim 2 wherein, the viewing  
position further comprises:

the second end of the first rotation support bracket  
15 positioned adjacent a bottom end of the first slot; and

the second end of the second rotation support  
bracket positioned adjacent a bottom end of the second  
slot.

20 4. The system of Claim 2 further comprising the  
second end of the first rotation support bracket operable  
to slide upward along the first slot as the display  
assembly rotates from the viewing position to the storage  
position.

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5        5.    The system of Claim 4 further comprising the  
second end of the second rotation support bracket  
operable to slide upward along the second slot as the  
display assembly rotates from the viewing position to the  
storage position.

6.    The system of Claim 4 further comprising:  
  
the display selectively movable with respect to the  
first support arm and the second support arm such that in  
10 the viewing position the display may be vertically  
adjusted; and

the second end of the first rotation bracket  
operable to contact an edge portion of the display as the  
display assembly is rotated from the viewing position to  
15 the storage position.

7.    The system of Claim 6 further comprising the  
second end of the first rotation bracket operable to urge  
the display forward to facilitate movement of the display  
20 assembly into the storage position.

8.    The system of Claim 2 further comprising a  
palmrest disposed in the tray forward of the keyboard,  
the storage position further comprising the display  
25 positioned forward of the palmrest.

9. The system of Claim 2, the viewing position further comprising the display assembly rotated at least 90° upward from the generally horizontal storage position.

5           10. The system of Claim 2 wherein the viewing position comprises the display assembly rotated up to approximately 102° from the generally horizontal storage position.

10           11. The system of Claim 2 further comprising a handle integrated into the display operable to move the display between the storage position and the viewing position.

12. The system of Claim 2 further comprising:

the display selectively movable with respect to the first support arm and the second support arm such that in the viewing position the display may be vertically

5 adjusted;

the first arm further comprises a first gear rack;

the second arm further comprises a second gear rack;

the display further comprises a gear assembly comprising a first gear fixed to a first end of a rod and a second gear fixed to a second end of a rod;

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the first gear operable to interface with the first gear rack; and

the second gear formed to interface with the second gear rack.

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13. The system of Claim 12 further comprising the first arm and the second arm each having at least two detents, each operable to interface with a detent assembly associated with the display to selectively retain the display with respect to the first arm and the second arm.

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14. A keyboard-display assembly for use within a rack system comprising:

a tray sized for installation within a rack system and having a keyboard portion for installing a keyboard component;

a display assembly mounted to the tray, the display assembly comprising:

a first display support arm pivotally connected to the tray and having a longitudinal slot formed therein;

a second display support arm pivotally connected to the tray and having a longitudinal slot formed therein;

a display slidably attached to the first support arm and the second support arm;

a first rotation support bracket pivotally connected at a first end to the tray and slidably connected at a second end to the first slot; and

a second rotation support bracket pivotally connected at a first end to the tray and slidably connected at a second end to the second slot.

15. The display assembly of Claim 14 further comprising:

the display having a screen-face and a rear-face,  
the display assembly movable between a storage position  
5 and a viewing position;

the storage position comprising the display  
positioned forward of the keyboard portion in a generally  
horizontal position and the screen-face having a downward  
facing orientation; and

10 the viewing position comprising the display assembly  
rotated into a generally vertical position.

16. The system of Claim 15 further comprising the  
second end of the first rotation support bracket operable  
15 to slide upward along the first slot as the display  
assembly rotates from the viewing position to the storage  
position.

17. The system of Claim 16 further comprising:

20 the display selectively movable with respect to the  
first support arm and the second support arm such that in  
the viewing position the display may be vertically  
adjusted; and

the second end of the first rotation bracket  
25 operable to contact an edge portion of the display as the  
display assembly is rotated from the viewing position to  
the storage position.

18. A method for providing a keyboard-display apparatus in a rack system comprising:

providing a display assembly having a first support arm with a first slot formed therein, a second support arm with a second slot formed therein, and a display  
5 slidably mounted to the first support arm and the second support arm;

pivotally mounting the display assembly to a tray, movable between a retracted position and an extended  
10 position;

pivotally mounting a first end of a first rotation support bracket to the tray and slidably mounting a second end of the first rotation support bracket to the first slot;

15 pivotally mounting a first end of a second rotation support bracket to the tray and slidably mounting a second end of the second rotation support bracket to the second slot;

selectively positioning the display assembly in a storage position comprising the display positioned  
20 forward of a keyboard installed within the tray, the display in a generally horizontal position and a screen-face of the display having a downward facing orientation; and

25 selectively rotating the display assembly to a generally vertical viewing position.



19. The method of Claim 18 further comprising  
slidably mounting the second end of the first rotation  
support bracket to the first slot such that the second  
end of the first rotation support bracket slides upward  
5 along the first slot as the display assembly rotates from  
the viewing position to the storage position.

20. The method of Claim 19 further comprising  
slidably mounting the second end of the first rotation  
10 bracket operable to contact an edge portion of the  
display as the display assembly is rotated from the  
viewing position to the storage position.